Dell Wyse Zero™ and ThinOS™







Powering Dell Wyse purposebuilt thin and zero clients

The sheer numbers and variety of cloud connected smart devices is exploding – from desktop to mobile to handheld. "Consumerization of IT" and the rise of "bring your own device" (BYOD) within the workplace are prompting the need for organizations to construct a strategy that not only accommodates this growing diversity in how apps and content are accessed, but actually welcomes it.

By moving from traditional self-contained physical desktops to virtual desktops, IT teams can secure vital content in the datacenter (where it belongs) while dramatically reducing the amount of time spent managing and maintaining user endpoint devices. Furnishing users with thin or zero client endpoints is the most secure and cost-effective way to provide virtual desktop access while allowing people to also use their own handheld devices to make mobile access as easy as possible. To provide the maximum security and ease of management for IT while giving users the best possible cloud and virtual desktop endpoint experience, Dell Wyse developed Dell Wyse ZeroTM and Dell Wyse ThinOSTM.

Where zero really means just that - zero

The Dell Wyse Zero engine is software technology that simplifies the development of cloud-connected smart devices – it's already used in millions of devices, including thin clients, handheld smart devices, and zero clients. It connects users to cloud computing services and virtual desktops with extremely efficient communications and protocol technology. For example, Dell Wyse PocketCloud uses Dell Wyse Zero functionality to expand the iPhone and iPad browsing capability to include Flash support by intelligently using cloud resources.

If you're looking to gain an edge in enabling widespread cloud access for your people, start with something mature, tested and purpose-built just for that – Dell Wyse Zero.

Dell Wyse Zero can help with portable software technology for use in building the next generation of smart devices connecting to the Internet and/or cloud services to provide

virtual desktop access. Extremely efficient and compact in size, Dell Wyse Zero addresses the limitations of current embedded options, which can be up to 1GB or more in size, and require excessive time to boot and initialize. Since Dell Wyse Zero is original technology, it does not require extensive protective measures associated with Windows or Linux-based embedded products.

Secure, efficient, and adaptable

A Dell Wyse zero client endpoint has no local operating system (e.g., no Linux, Windows, or other application platform base). Rather, it contains just the Dell Wyse Zero firmware base and nothing else. This is key to the definition of a true zero client. Since there is no local operating system with published APIs or user-accessible interfaces or open source code, Dell Wyse Zero offers "zero attack surface". It is thus truly immune to viruses and malware, as hackers literally have nothing to "aim at" from the network.



Xenith Pro zero client



This is why Dell Wyse zero clients offer a huge security and content protection benefit. Many endpoint vendors use a Linux distribution in devices they call a zero client, but these devices fail the Dell Wyse zero client security test, since the software layer must not have ANY published interfaces and NO open source. These both represent real security holes that true zero clients must not have.

Dell Wyse zero clients include a small software layer to allow for occasional updates to display protocols (e.g., Citrix HDX and Microsoft RDP/RemoteFX) security protocols on the network. Failing to have some local software causes a zero client to be "frozen in time" and unable to adapt to needed changes. So while Dell Wyse zero clients boast excellent security, they are also able to adapt to display and security protocol changes and advancements as they occur.

Automatic "hands off" management

Another hallmark of Dell Wyse zero clients and ThinOS-based thin clients is automatic management that requires zero touch after the product is installed. "Patch Tuesday" becomes a thing of the past, as IT administrators no longer need to worry about manual or scheduled software updates. Dell Wyse offers multiple management options for zero clients and ThinOS-based thin clients based on environment and number of endpoints, but all are "light" or fully automatic. For example, Dell Wyse Xenith zero clients for Citrix are automatically managed but can also be managed by the XenDesktop system itself. Dell Wyse thin and zero clients can also be managed by

Dell Cloud Client Manager, the cloud-based fixed and mobile device management console offered as a service. In fact, after installing Dell Wyse zero clients or ThinOS-based thin clients, many Dell Wyse customers' IT teams have said that they have basically gotten out of the endpoint hardware maintenance business. The amount of time saved in no longer needing to "touch" user endpoints can be huge.

Dell Wyse ThinOS: Where thin clients behave like zero clients

Dell Wyse ThinOS uses Dell Wyse Zero as its basis to provide an exceptionally secure and easy to manage firmware base designed specifically for thin clients. Since it is built upon Dell Wyse Zero, Dell Wyse ThinOS is designed for maximum thin client endpoint security with zero attack surface, and offers excellent performance for an outstanding end user experience. For example, Dell Wyse zero clients and ThinOS-based thin clients go from power-on to fully functional desktops in under ten seconds. Users like that! This is because ThinOS includes none of the "extra baggage" contained within general purpose operating systems re-purposed for thin client functionality. With ThinOS, you get an exceptionally secure, optimized firmware base designed for enhanced thin client functionality and performance, and nothing else. And that's a good thing!

Summary

Dell Wyse invented the thin client, developed the zero client term and definition in 2006, and has led the market in zero clients since, selling more than all competitors combined.





R10L thin client

With over 220 patents granted and pending in thin and zero client technology, Dell Wyse has consistently taken thin and zero client functionality to new levels of security, ease of use, and performance. Dell Wyse Zero and Dell Wyse ThinOS serve as shining examples of just that. With decades of focus and innovation dedicated to optimizing access to the cloud while making life easier for IT teams, Dell cloud client computing continues to deliver on the promise of enabling any user to access any app from any device.

Dell Wyse Zero and ThinOS Key Features At-a-Glance

- A Dell Wyse exclusive firmware offering
- Extremely compact only about 5 MB in size
- Can complete a full boot in less than 10 seconds
- Is virus and malware immune
- Supports Citrix HDX
- Most advanced non-Windows RDP client based on RDP 7.1 and supporting advanced features like RemoteFX
- Support for VMware View via RDP
- Self-configuring via the network



Learn more: For immediate assistance in North America, contact Dell Wyse at sales@wyse.com or call 1-800-438-9973

